

# End-of-life Management of Photovoltaic Systems

Solar Stakeholder Group February 17, 2022



## Agenda

- Recap of progress on the Proviso.
- Discussion of S. 525
- Other Proviso matters.



### **Budget Proviso 34.62**

The Department shall submit regulations to guide in:

- The management of end-of-life photovoltaic modules and energy storage system batteries on solar projects.
- The decommissioning of solar projects in excess of thirteen acres- to include partial refurbishing and complete decommissioning.



#### **Budget Proviso Matters**

- Disposal of PV modules as HW or SW
- Preferred methods to dispose of PV modules
- PV module waste impact on SC LFs
- Decommissioning requirements/guidance
- Infrastructure to collect, transport EOL material
- Stewardship programs



#### Proviso progress

- Budget proviso went into effect July 2021.
- Two quarterly reports have been sent to the legislature.
- Four stakeholder meetings have been held with other discussions being held with appropriate stakeholders.
- Research into the proviso matters has been underway since July 2021.
- Field trip to a Pelion, SC solar site in November 2021.



#### Website

- Solar website: <a href="https://scdhec.gov/environment/land-management/solar-panel-stakeholder-group">https://scdhec.gov/environment/land-management/solar-panel-stakeholder-group</a>
- Now contains both quarterly reports completed so far, next one will be uploaded in April.



#### Feedback from previous meetings

- Focus of the past four meeting and discussions has been on decommissioning requirements.
- Main questions:
  - Definition of "decommissioning"
  - What would be the EOL timeline?
  - Who is responsible?
  - What entity (if any) should oversee this process?
  - Financial assurance?



# Feedback from previous meetings (cont'd)

- Majority consensus from the group seemed to prefer local oversight of solar farms.
- DHEC should provide local governments templates for decommissioning requirements for solar farms.
- DHEC is currently working on such language, is planning to provide a variety of possible decommissioning models to fit needs of different counties.



#### S. 525

- Signed by Governor on 1/27/22
- Section 5 of the Act contains the language from Budget Proviso 34.62 and requires the Department to create an application for solar farms in excess of thirteen acres.
- This application shall include "local approval of a site plan" and submission of a "nonbinding plan" to manage EOL Solar Panels + Equipment.

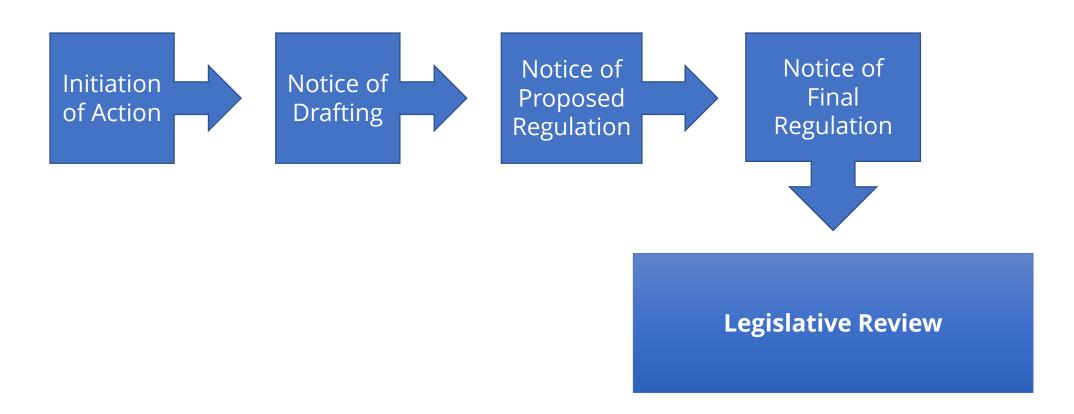
#### South Carolina Department of Health and Environmental Control Healthy People. Healthy Communities.

#### S. 525

The department must require, as part of a new application or an application pending on July 1, 2022, local approval of a site plan for a solar farm in excess of thirteen acres, that an owner, lessee, or developer of real property upon which the site is situated must submit to the department a nonbinding plan to manage and dispose of end-of-life photovoltaic modules and energy storage system batteries and decommission solar energy equipment, facilities, or devices. The department is authorized to, by regulation, establish a more formal or detailed process for receiving the plans submitted pursuant to this provision, to include increased reporting requirements.



## Regulation Development





#### Regulation Development

- The Department submitted a Notice of Drafting (NOD) for publication in the State Register on February 25.
- 30-Day comment period ends March 28.
- Notice of Proposed Regulation (NOPR) will be developed and published on April 22.
- Scheduled for eventual submission to the legislature in June.



#### **Questions for Stakeholders**

- What is the best way to calculate how much (in tons) of PV modules exist in SC? (LF capacity)
  - How many and how old are they? (estimated lifespan of ~25 years)
- What kinds of infrastructure is missing to facilitate the recycling of PV modules + batteries?
- How demanding is it to recycle/dispose of PV modules?
  - How cost effective, what is the process, where do the modules go?



#### Next steps

- Regulation Development:
  - Send NOD comments by March 28.
  - Department is working on language to address 525.
- Proviso matters:
  - Send info to the Department.
  - Department will continue gathering research, coordinating answers to Proviso questions with stakeholder group.
- Next Quarterly Report will cover the activities from January 1-March 31.

# **CONTACT US**

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